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**Managers shaping the service triangle:
Navigating resident and worker interests through work design in nursing homes**

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Managers shaping the service triangle:

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Abstract

Managers play a key role in shaping the service triangle and navigating stakeholder interests within this. In healthcare, labor shortages are prompting consideration of the consequences of care delivery for service users and staff. Here we consider how senior nursing home managers tasked with balancing resident and worker interests manage tensions using work design. Findings identify a five-cluster typology, reflecting variations in how managers from twenty Flemish nursing homes operationalize the same resident-centred care model. Managers purposively shape a different service triangle in each operationalization, variously prioritizing benefits for residents, seeking the golden mean or attempting to suppress tensions.

Keywords: • service triangle • managers • residents • care workers • work design • nursing home •

Managers shaping the service triangle:

Navigating resident and worker interests through work design in nursing homes

The service triangle is an analytical framework that emphasizes the interactional dynamics between management, workers and clients in service work (Subramanian & Suquet, 2018), extending the traditional focus on management – worker relations. Indeed, as service delivery is increasingly customer-oriented, most sociological studies that use the service triangle have focused on the dyadic relationship between worker and client. In contrast, managers have received least attention (Bolton & Houlihan, 2010), despite their role in shaping the service triangle (O’Riain, 2010), and limited understanding of how tensions between stakeholder interests are accommodated (Kossek et al., 2020). Indeed, ‘All managers, wherever positioned, are tasked to navigate the divergent interests of different stakeholders and balance the aspirations of organizational objectives and the realities of day-to-day demands’ (Bolton & Houlihan, 2010: 379). Here, we examine the delivery of nursing home care to elderly residents from the perspective of the managerial pole of the service triangle. We consider how senior nursing home managers tasked with balancing resident, worker and organizational interests manage tensions using work design (Grant & Parker, 2009).

The context of the study is the introduction of a person-centred care model. Aligned with the typical customer orientation of service delivery, person-centeredness puts the residents of nursing homes in a core position in the service triangle (Leutz et al., 2009). Intended to be beneficial to service users, person-centred care models can have variable implications for workers (Vermeerbergen et al., 2017), that can include substantive challenges such as work intensification (Lopez, 2006a). This is problematic due to the growing shortages of workers in the care sector (Vogus et al., 2020), the prevalence of burnout among these workers (Bourdeaud’hui et al., 2017), and the dependence of resident-oriented care on the work of frontline staff (Bishop, 2014). Indeed, the prevalence of these workforce issues across healthcare has prompted recognition that care of the resident / patient requires care of the provider (Bodenheimer & Sinsky, 2014). For managers, this suggests a need to simultaneously address the interests of care recipients and givers as they shape how care is organized and delivered (Leutz et al., 2009; Lopez, 2006b). This shifts attention from the historical focus of the service triangle on three-way interest alliances (c.f. Leidner, 1996), to how best to navigate and accommodate tensions (Kossek et al., 2020). Yet this is not necessarily straightforward: some suggest that nursing home managers are constrained in acknowledging and addressing challenges for staff (Lopez, 2006a), especially in the case of budget limitations (Bishop, 2014). We respond to calls for further attention to managers in the context of the service triangle, and recognition of their role in navigating the interests of different stakeholders (Bolton & Houlihan, 2010). In so doing we emphasize that managers hold a key decision-making role, including regarding work design (Grant & Parker, 2009). Although how managers approach work design has scope to influence service users and providers experiences at work, this has been neglected (Morgeson & Humphreys, 2008). Specifically, we ask ‘what tensions do managers perceive in the consequences of a care model for residents and workers, and how do they use work design to manage these tensions?’

The question is explored via comparative case-study research, incorporating twenty nursing homes from Flanders, the Dutch-speaking part of Belgium. Each adopted normalized small-scale living (NSSL), a care model that - similarly to ‘Green Houses’ in the US (Brune, 2011)- aims to afford residents the opportunity to lead as close to a homelike life as possible. Our

findings shed light on managerial decision-making regarding the introduction and operationalization of a new care model, including the approach to the associated tensions between residents and workers in the service triangle. Managers prioritized service users in decision-making regarding the introduction of the care model. However, managers recognized a range of tensions arising during adoption of the model, leading to different operationalizations. Premised on variations in work design, these led to a range of purposively enacted trade-offs. Benefits and burdens for workers varied across the cases suggesting scope for managers to mitigate – if not eliminate – tensions. The findings contribute by providing insight into how managers navigate divergent interests in the service triangle using work design.

Next, we consider the improvement of care and work as key issues for, and potential sources of tension between the interests of, residents and workers in the context of the service triangle. We then consider research regarding work design, as key lever available to managers. Thereafter we detail the methods and key findings of the study and discuss conceptual and practical implications.

Management responses to interests in the service triangle: Improving care and work

Studies of the service economy are increasingly evident in the sociology of work, with a particular focus on the service triangle (O’Riain, 2010). Within these, most attention has been afforded to frontline service providers (Bolton & Houlihan, 2010), and how their position in the service triangle has shifted due to an increasing focus on client satisfaction. Such studies are evident across service sub-sectors – including home care (Payne & Fisher, 2019), banking (Carollo & Solari, 2019) and retail (Misra & Walters, 2016). Studies that extend beyond workers typically focus on relations between actors, leading to calls to explore each pole of the service triangle (Lopez, 2010).

Here we focus on the manager as actor. The limited existing studies of managers emphasize their important role in shaping the service triangle and the relationships within it (Bolton & Houlihan, 2010; O’Riain, 2010). In doing this, managers have to actively balance aspirations, demands (Sabramanian & Suquet, 2018), and the consequences of decisions made in favor of one actor for others. Early recognition of this in the context of enhanced client-centredness was evident in Fuller and Smith’s (1991) assertion that:

customer control may prompt various contradictions and resistances, ruptures in the organization of work that sociologists of work may want to investigate (p. 12)

A particular challenge for managers is how to manage tensions between high performance, client satisfaction and employee wellbeing (cf. Keegan et al., 2019). In nursing homes, these tensions translate in simultaneous pressures to improve care and work (Bishop, 2014). Pressures to enhance residents’ care reflect changing preferences for long-term support among elders. Among baby boomers there is a trend to plan for living in an apartment, retirement community or assisted living (Robison et al., 2014). Yet demographic projections show that nursing home residents are set to near treble in the US and in the Flemish context considered here (Murdock et al., 2015; Pacolet & De Coninck, 2015). Future residents are more likely to have higher expectations regarding care quality and to expect this to involve customization both of the settings where care is provided and of the service aspects of care (Brune, 2011). Achieving this requires changes in the organization of frontline work (Leutz et al., 2009), giving managers a crucial role in navigating tensions between improving care and work in the context of the nursing home care service triangle.

It is well established that health services work is demanding (Vogus et al., 2020). Within nursing homes, studies of the working lives of staff have identified challenges with the content and structure of job roles (Bourdeaud'hui et al., 2017; Edvardsson et al., 2009). Further, the changes and challenges faced by the elderly place workers serving this population at particular risk of developing compassion fatigue (Leon et al., 1999). Compassion fatigue involves physical and psychological exhaustion that can lead to reduced concern and empathy for clients as well as job dissatisfaction (Figley, 1995). The literature on emotional labor also suggests that intense worker-client interactions can have negative effects on employees, resulting in health penalties in resource-deprived job contexts (e.g. resource constraints: Rodriquez, 2011; limited job autonomy and limited co-worker relationships, see Singh & Glavin, 2017). In 2016, half of the care workers in Flemish nursing homes reported excessive time pressure and emotional demands (Bourdeaud'hui et al., 2017).

In contrast, research also recognizes the satisfaction workers can derive from relationships with clients. Literature on emotional labor recognizes that healthcare workers can gain fulfilment both from this, and from how it is valued by those receiving it (DiCicco-Bloom & DiCicco-Bloom, 2019). In a similar vein, compassion satisfaction suggests that workers can receive pleasure from care giving, helping others, and making a contribution including to colleagues (Smart et al., 2014). Common to these bodies of work is recognition of the value of connecting with others, making a difference, and being acknowledged – factors that have collectively been used to characterize meaningful work (Pavlish & Hunt, 2012). Relational work design reflects these themes, emphasizing scope for employees to derive work commitment and appreciation from jobs structured to support relationships. Close contact with clients enables employees to derive insight into their viewpoints, to see the impact of their work, and to benefit from relationships with the beneficiaries of their labor (Grant, 2008). Thus, existing literature suggests that relationships with service users can serve both as a job demand – with physical and psychological costs, but also as a job resource – helping to reduce these costs (cf. Demerouti et al., 2001). In addition, it suggests that work design can be used by managers to influence employees' relationships and experiences at work (Grant & Parker, 2009), including in nursing homes. Given the importance of considering how employer decisions shape this (Findlay et al., 2017), it is to work design that we now turn our attention.

Managing tensions through work design

Work design refers to the structure, enactment and modification of jobs, tasks and roles and can impact individual, group and organizational outcomes (Grant & Parker, 2009). Specifically, work design informs how tasks are divided between different organizational units, teams and jobs and influences job-related strain (Karasek, 1979) and prospects for retention (Elovainia et al., 2005). Work design therefore provides scope to mitigate staffing challenges in the care sector.

Key aspects of work design include the task pool, referring to the content and range of tasks undertaken within a work unit (Benders, 1995); the division of work between employees (De Sitter et al., 1997); and teamwork (e.g. degree of self-management, and interdependence of teams, cf. Thompson, 1967). In turn, these aspects are likely to be influenced by decisions regarding the localization, centralization and/or externalization of work tasks (De Sitter et al., 1997). Centralization and externalization can lead to the presence of service teams specialized in specific care tasks.

Importantly, the division of work between organizational units and teams, as well as the design of specific jobs, differs between conventional and NSSL nursing homes (Declercq, 2009).

Conventional large-scale nursing homes are characterized by long hospital-like hallways and living units with more than 20 residents. Typically residents in these units receive services from (or are sometimes moved between) a range of centralized units, reducing scope for resident involvement in daily activities (Declercq, 2009). In contrast, NSSL has small living units that typically house between six and fifteen workers (Verbeek et al., 2009). Each living unit has homelike facilities (kitchen, living room, laundry, bathrooms) that enable residents to maintain social and daily living activities and that also support staff responsiveness. Resident-centred and responsive care, as well as close relationships between residents and workers, are also supported by integrated jobs (Declercq, 2009). These give workers responsibility for health and social care tasks, as well as decision-making autonomy regarding their execution (Verbeek et al., 2009). In effect, staff affiliated with a living unit are envisaged to undertake, so far as possible, all tasks required to take care of its' residents.

Despite this ideal-type, variation in the implementation of innovations is common (McDermott et al., 2013). Different operationalizations of NSSL may therefore arise (Verbeek et al., 2009). Where tensions arise, there is scope for managerial decision-making and work design operationalizations to align with one side or concern (e.g. care quality / employees experiences of work) or prioritize one stakeholder group over another (Jarzabkowski et al., 2013; Keegan et al., 2019). Alternatively, managers may attempt to balance interests or address the causes of tension (Jarzabkowski et al., 2013). However, despite managers' key role in organizational decision-making and operationalization, to date no studies have yet explored managers' perceptions of tensions in the consequences of a service model for service users as well as staff, or how managers use work design to navigate such tensions (cf. Morgeson & Humphrey, 2008) in the context of the service triangle.

Methods

The case context and approach

A comparative case study design was utilized, focused on twenty Flemish nursing homes that had adopted the model of NSSL. Purposively selected, these comprise, to our knowledge, the entire population of such homes in Flanders. Thirteen homes were identified via their membership of a regional network of NSSL nursing homes that promoted the NSSL model and provided opportunities for peer support and learning. Seven additional homes were identified via snowball sampling. The participating organizations all self-identified as having adopted the NSSL model. Table 1 details the characteristics of the nursing homes included in the study. The nursing homes had between 48 and 159 residents, and between 45 and 165 care workers. This is representative of nursing home scale in Flanders. A substantial majority (88.5 percent) of the care workers are women. Importantly, Flemish nursing homes are subject to sector level collective bargaining, determining wages for workers. In effect, this context provides a 'natural experiment' in which to examine variations in job design, holding compensation constant.

Table 1 about here

Data collection

Secondary, observational, interview and focus group data were collected from the twenty case organizations between January 2016 and April 2018. Figure 1 shows the data collection process. Secondary data was collated from 59 websites and 34 administrative reports (i.e. balance sheets, annual reports, independent care quality reports). Observational data were gathered from visits to each organization in 2016 and 2017. In total 93 interviews were conducted with care workers and nursing home managers as part of a research project considering the impact of organizational interventions on the quality of employees' working lives. This paper focuses on responses from the twenty nursing home managers. Aged between 44 and 58, just over half were women, and all except one held a post-secondary qualification. The managerial interviews ranged between one and four hours in length. Forty-one hours of data were recorded and transcribed verbatim. Two focus groups averaging three hours in length were conducted with the managers in April 2018, to present and validate the study findings.

Figure 1 about here

During interviews respondents were asked to describe the rationale(s) for introducing NSSL; the work design utilized to deliver it; why this design was chosen and; the consequences (and related tensions) for residents and staff. Reflecting themes evident in our literature review, questions relating to the supra-unit organization of work asked about aspects that were centralized or externalized. Questions relating to intra-unit work design considered (1) the task pool (content/range of tasks); (2) the division of work between care workers (e.g. universal tasks vs. specialization); (3) the degree of autonomous teamwork and; (4) the interdependence of teams.

Data analysis

Within case data analysis summarized the rationale for introducing NSSL, mapped the work designs, and the associated consequences for residents and staff. Subsequent cross-case analysis aggregated shared and divergent experiences across the nursing homes.

First, publicly available secondary data together with interview data were thematically analyzed to identify the rationale for introducing NSSL. Thereafter the work design characteristics of each nursing home were identified using a combination of secondary data (i.e. website data, annual reports, training material for new employees, progress reports on the change and newspaper articles) and interview data, confirmed with observational data. These data were subject to qualitative thematic analysis. Initial deductive themes were informed by prior research (De Sitter et al., 1997 with intra-unit (task pool, division of work, team interdependence and autonomous teamworking) and supra-unit (externalization of tasks, centralization) components thematically aggregated. A summary is provided in Table 2. In each of these stages the first author initially coded the data. This was discussed and confirmed with the third author.

Table 2 about here

Second, as variations in work designs were evident, analysis moved beyond considering of individual organizations' characteristics, with NSSL nursing homes clustered according to

groups of shared characteristics. For clustering, Hair et al. (2006: 600) note that sample size should represent underlying structures in the population and ‘does not relate to issues of statistical nature, but it does relate to the ability of the sample to identify managerially useful segments’. Following this, the sample size was representative, premised on the full regional population of NSSL nursing homes. The number of clusters was identified via Ward’s hierarchical procedure (Ward, 1963), using Euclidean distance measures. Scores were given to the following five design characteristics: ‘task pool’, ‘division of work’, ‘autonomous teamwork’, ‘interdependence of teams’, ‘centralized service units’ and ‘externalization’.

The ‘task pool’ variable indicates the range of tasks undertaken within a unit, ranging from one to six. The ‘division of work’ variable details the specialization of care workers, ranging from one (limited) to three (substantial). The ‘autonomous teamwork’ variable represents the degree of self-management, ranging from one to seven (Nijholt & Benders, 2010). The ‘interdependence of teams’ variable shows whether and how teams are attached to living units, with the scores one (attached to one unit), two (attached to one unit but able to work in second unit) and three (attached to two units). It was decided to consolidate externalization and service units into one variable as the nursing homes had similar scores for both. The ‘service units/externalization’ variable shows the degree of externalization and service units are present in the nursing homes, ranging from one (limited) to three (extensive).

Two statistics were considered for selecting the final number of clusters: R-Square (RS) and the Root Mean Square Standard Deviation (RMSSTD). While the first details the extent to which the clusters differ, the second shows the homogeneity within the clusters. The proportion of variance accounted for (RS) was about 86 per cent for four clusters, 92 per cent for five clusters, and 94 per cent for six clusters. The RMSSTD score was .46 for four clusters, .39 for five clusters, and .43 for six clusters. The five-cluster model was selected, given little difference in the RS score between five and six clusters, and greater difference in the RMSSTD scores. The analyses were performed using SAS version 9.4. The five clusters of work design operationalizations were validated by managers in the focus groups conducted.

Next, attention turned to the implications of the work designs. Thematic analysis of the interviews and observations identified emergent themes regarding the perceived benefits and challenges for residents and workers in each work design; the relationship between worker and residents’ interests; and whether/how managers attempted to reconcile tensions in decision-making regarding the introduction and operationalization of NSSL. Here the first author conducted the initial coding, which was then discussed with the co-authors. Codes derived from the data were repeatedly revisited based on the literature, emergent findings, and discussions in the managerial focus groups.

Findings

First, we note that every manager identified residents’ quality of life as well as the quality of care they receive as the primary motivator for introducing NSSL.

The motive was the resident. When we became aware of the model, we [management] thought “That’s real life and living”. We accept that unfortunately residents do need medical care. But beyond that, the quality of life and the meaning of life is much better in normalized small-scale living. (...). To this day I’m still passionate about the idea of normalized living. So, the motive was the [residents’] quality of life. That and that alone.

Only two organizations identified workers as a consideration in the decision to adopt NSSL. One manager noted that:

We also implemented normalized small-scale living for the employees. They worked [before NSSL was implemented] as you would in an assembly line and had incredibly heavy workloads.

Next, we detail five different operationalizations of NSSL evident across the cases. We consider how managers navigated tensions and made trade-offs in the consequences for residents and workers in each.

Five work design clusters and implications for residents and workers

There was substantive difference in the intra- and supra-unit organization of work across the twenty nursing homes. At the intra-unit level, organizations differed in the task pool (the content and range of tasks undertaken by workers); the division of work between care workers (universal tasks vs. specialization) and; how teams were organized and managed (autonomous teamwork and interdependence between teams). At the supra-unit level, organizations differed as to whether and which tasks were externalized; and whether service teams supplemented the care provided by living unit staff. Together these aspects influenced what tasks were undertaken, whether these were completed in-house or externally, how in-house tasks were divided between generalist and specialist workers, and whether staff were affiliated to one or more living units. Based on these, five clusters of work designs were identified via Ward's method and validated in the two managerial focus groups. These clusters form a typology of work design. Cluster one prioritized the quality of care and life for residents. Clusters two, three and four attempted to balance improvements in care and work. Cluster five attempted to avoid tensions via a limited operationalization of the new service model. Each cluster is outlined here and summarized in table 3 (see later).

Prioritizing the benefits for residents

Cluster 1, characterized by standalone NSSL living units, clearly prioritized benefits for residents. The three nursing homes in this cluster were closest to the 'ideal-type' of NSSL, placing the living unit at the heart of care delivery. As one organization's documentation noted '*Within the larger organizational context, we aim to provide small scale and humanized care, with living groups of around 15 residents*'.

Managers perceived that residents benefitted from a homelike environment and from close relationships with staff. Staff undertook 'universal worker' roles, involving responsibility for all personal and social care tasks for residents within their living unit. This was perceived to facilitate strong staff-resident relationships, generating worker understanding of the resident as a whole person and supporting swift recognition of, and response to, residents' needs.

From a worker perspective, universal roles meant that only one or a small number of employees were present in each living unit.

With a group of 30 residents you have three or four care workers. In a normalized small-scale home you need one care worker for eight residents.

This led to complex jobs with a broad task pool. Some managerial respondents suggested that this gave staff greater control over the care process, reducing job-related strain and increasing engagement. Others recognized that workers could feel less competent in some areas than others, and sometimes experienced time pressure and role overload due to their wide-ranging

responsibilities. Staff in standalone units were perceived to lack support, making job strain a prevalent concern. Staff also faced heavy emotional demands, related to the development of close relationships with residents.

Working alone with your residents for eight hours. That's damn heavy. You have no social contact. Because of that, the workers who are employed in normalized living units have no frame of reference [for how others' do things]

Managers recognized that, for some staff, the model impeded their capacity to work at the top of their skill set. Further, because the small teams attached to each living unit worked autonomously, quality and safety were a concern, captured in one manager's assertion that *"I shudder to think of letting care workers work alone"*. A less acute, but related issue, pertained to cover for illness and absence. Given the close relationship between residents and workers, continuity of care could be negatively affected where staff cover was required.

In sum, managers suggested that the work design underpinning this cluster had scope to provide a home-like and relational living environment for residents. On the flipside, it reproduced the pressures faced by family home caregivers. Demanding a broad range of competencies from workers, it could result in job strain, and reduced workers' opportunities to learn and receive support from peers. This was particularly problematic for inexperienced staff and at times of pressure. This first cluster is suggestive of potential for tension between the experiences of residents and the demands made of care workers. Findings also flag one area – worker isolation – where concern may arise from a worker and resident perspective. The work designs underpinning cluster 2 and cluster 3 attempt to address some of these concerns, with cluster 2 focusing on reducing role overload, and cluster 3 focusing on reducing worker isolation and increasing social support.

Balancing benefits and challenges for residents and workers

Three operationalizations of NSSL (clusters 2, 3 and 4) attempted to manage the tension between improving care and work by balancing the benefits and challenges for residents and workers. Cluster 2, characterized by 'serviced-standalone' living units, was evident in three organizations. Here managers continued to place the living unit at the heart of care delivery and focused on ensuring residents had a home-like environment and high-quality relationships with staff. However, to reduce job strain, the living units received support for two sets of tasks – social/homecare and clinical. Support was premised on supra-unit decisions that served to reduce the range of tasks undertaken by living unit workers (task pool) by centralizing or externalizing these tasks.

First, managers discussed the centralized and/or externalized provision of social (e.g. entertainment) and homecare (e.g. catering, laundry, cleaning) tasks. Respondents recognized that these could be efficient in addressing specific tasks.

Interior [cleaning] is a separate team. (...) The house coordinator is too busy taking care of the living and care situation of our residents and hasn't any time for cleaning. Cleaning is not about throwing around buckets of water. It is quite technical. So many milliliters of cleaning products.... (...) workers get special training for this.

The selective centralization or externalization of tasks did lower workload for care workers:

We have a central kitchen. Meals are transported from there to the living units. Everything is heated in the living units. (...) We did this because (...) care workers have a limited number of hands with which to feed [cook, serve and support] all the residents. Their workload was just too large.

However, residents and their care workers lost control over the components of the care process that were centralized/externalized, with coordination and responsiveness often proving problematic. One manager recounted an incident whereby an external kitchen omitted delivery of a halal meal for a Muslim resident. The on-duty staff member was unable to provide a substitute, causing stress for the resident and the worker.

The second way in which the task pool was reduced was the centralization of professional clinical support into service units (e.g. nursing, physiotherapy) providing support to residents across multiple living units. The number of living units covered by each professional varied according to the number of residents and their care needs. However, every home tried to affiliate professional service unit staff to specific living units, to ensure that they had some familiarity with residents.

Managers noted that the professional specialization inherent in centralized nursing/physiotherapy service units could have quality related benefits and enhance peer support:

We [managers] deliberately chose to have nurses line managed by a head nurse. (...) Nurses need to conduct specialized tasks, and therefore need to learn from each other. (...) When put together nurses monitor their specific domain.

Professional specialization was seen to support recruitment, as some workers wished to work at the top of their skill set. However, professional service unit staff only engaged intermittently with residents and were less aware of individual histories and needs.

Thus, whilst the ‘serviced-standalone’ model in cluster 2 was perceived to reduce work demands for care workers within living units (via a reduced task pool) and increase social support for professional workers (via service units), it also begins to move away from the idea of the ‘universal’ care worker role. These changes in work design to reduce job strain raised the potential for fragmenting the care process and reduced responsiveness to residents’ needs.

Cluster 3, characterized by ‘linked’ living units, was evident in five homes which had physically connected living units (separated by doors) and associated links between care teams. This aimed to address the issue of worker isolation. However, managers did recognize two problems. First is that, in practice, two inter-connected small living units tended to operate as one large unit, leading to greater division of work between care workers and loss of the ‘universal worker’ role and associated benefits. Second, as a result of this, care workers had more distant relationships with residents, exacerbated by scope for closer peer-to-peer relationships. These perceived downsides were succinctly summarized as follows:

Coincidentally, at four this afternoon I went into a living unit. The table was set and the care workers were chatting with each other [and not working with/talking to the residents]. That is not ok.

The impact of having linked living units on work demands was less direct. Within this cluster, few teams had centralized/externalized service units. However, linking teams did provide a mechanism for support. Managers reported that care workers could ask colleagues in linked units for assistance when work pressure was high (and provide the same in return). In addition, this work design led to a reduced task pool in the living units. Specifically, as teams were linked, it gave scope for specialization, especially among skilled professionals (e.g. nurses, occupational therapists, physiotherapists) who conducted tasks demanding particular expertise. For example, nurses moved between linked teams and undertook tasks with clinical components. A similar dynamic also emerged among some care workers, for example, where

an individual had trained in falls prevention. For workers, managers noted that having linked units reduced worker isolation, provided social supports, and gave opportunities to gain and utilize more specialized knowledge. In turn, this could enhance job satisfaction for specialized professionals, reduce the task pool and associated job demands for care workers, and support the provision of skilled care to residents.

For residents, managers reported that whilst they could benefit from skilled and specialist support, care could become more fragmented and less responsive within linked units. Further, the move away from the concept of the universal worker role weakened residents' relationships with care workers. Reflecting this one manager noted the challenge of finding 'the golden mean' to balance worker and resident needs. They personally prioritized avoidance of staff working alone. Here, as previously, we see tension between strategies to support care workers and factors contributing to fragmentation in the care process and reduced responsiveness to residents' needs.

Cluster 4, premised on 'shared-staff', was evident in four NSSL homes. Here staff were organized in large overarching workgroups affiliated to multiple units. These were typically either physically linked units (e.g. by doors) or two units that shared a living area.

Staff were mobile and allocated to work in a particular unit on a regular (i.e. daily) basis. This involved a marked move away from the close personal relationships and continuity of care particularly evident in cluster 1 and maintained in cluster 2. As one manager noted:

This affects the rhythm of work and the tasks care workers perform. (...) Care workers are more likely to sit and chat together. They won't mix with the residents as much. (...) and will be less aware of the residents' backgrounds and needs. With [standalone living units], care workers often eat their lunch together with the residents.

The task pool in the shared-staff NSSL units was narrower than in clusters 1 and 3, reduced by divesting required roles to both specialized professionals working across units (e.g. 2 days in one unit, 3 in another), and centralized/externalized providers. This work design served to enhance relationships between care workers who worked in larger teams than in clusters 1 and 2. The larger pool of colleagues was perceived to make it easier to gain help when required. In this way it could reduce job demands. However, as noted previously, a consequence of combined specialization, centralization and externalization was substantively reduced capacity for responsiveness to residents' needs. Thus, for residents, managers noted that cluster 4's design negatively impacted their experiences of care relative to cluster 1.

Keeping the equilibrium: avoiding tensions between residents and workers

Cluster 5, the 'small-scale conventional' cluster was evident in five organizations. Closest to a traditional nursing home, this cluster had limited operationalization of NSSL, constrained to change in the care/work environment, rather than the care/work process. Despite having the small living units associated with NSSL, this cluster displayed the specialized tasks, substantial centralization, and outsourcing of services associated with more traditional care models. Consequently, these units had narrow tasks pools and did not operate as autonomous teams. Most decisions regarding work organization were undertaken by unit supervisors. By maintaining traditional care and work processes, managers avoided surfacing tensions. One manager noted the benefits of this by suggesting that existing ways of working were comfortable – and therefore attractive – for some staff.

My former boss used to tell a story about choosy chickens, picking the grains they like best. (...) Some chickens like some grains, and others like different ones. (...) In the

same sense, not all care workers want a lot of autonomy. (..) That is why we don't oblige our staff to work in autonomous teams.

Care workers therefore had reduced autonomy, lesser capacity to respond to residents' needs, and less intense relationships with residents, relative to other clusters.

Managers' perceptions of the consequences of each cluster are summarized in Table 4. This makes clear that whilst residents and care workers can derive benefits from the adoption of work designs detailed for clusters 1 to 4, the associated challenges disproportionately affect workers. This aligns with the reported resident-centered rationale for implementing NSSL. Key potential challenges for residents relate to the loss of specialized care with the work designs inherent in clusters 1-3. Challenges for organizations relate to obtaining/developing workers with the broad range of competencies required for clusters 1-3. Challenges for workers relate to work intensity and volume, emotional demands and isolation. Table 4 also shows that the clusters deal differently with tensions. Cluster 1 clearly prioritizes residents, creating many challenges for workers. A balance between benefits and challenges for residents and workers is identified for clusters 2, 3 and 4. Lastly, organizations in cluster 5 limit operationalization of NSSL to changes in the care/work environment to avoid surfacing tensions – keeping their starting balance of benefits and challenges for residents and workers.

Table 3, 4 about here

Discussion

The article contributes by providing insight into how managers navigate divergent interests in the service triangle using work design. In focusing on senior managers, it adds to the limited extant research on middle and front-line managers. Findings evidence variation in managerial responses, highlighting the value of examining poles of the service triangle, and of exploring whether and how tensions in the service triangle are accommodated using work design. Although studies of work design are often quite deterministic, the typology - premised on variation in the operationalization of a care model - illustrates how managers mindfully engaged with perceived tensions and trade-offs in the service triangle. This moves discussion beyond consideration of unintended consequences for employees, to take account of purposively selected work design choices that shaped relations between actors in different ways. Some managers worked to find the golden mean by balancing resident and worker interests, affording different weightings to sources of tension (e.g. worker overload; isolation) in selecting work designs. Others acknowledged tensions but prioritized benefits to residents over the challenges faced by employees. A third group worked to suppress tensions via constrained operationalization of the care model, ultimately adopting an approach incongruent with the relational and holistic orientation advocated by resident-centred care. The typology evidences the difficulty of maximizing benefits and minimizing burdens for all actors in the service triangle but does suggest potential to mitigate, if not eliminate, tensions.

Previous work design research suggests that affording explicit attention to the minimization of trade-offs may help to find ways to address tensions previously considered inherent. Care work is underpinned by a dilemma whereby we want compassionate and involved care workers, but that same compassion and care can erode their personal resources. Quality of working life is not just important in its own right, but also to increase an organization's capacity to attract and

retain staff. In this study a particular tension faced by managers across the cases was the job strain and isolation that can result from work design encouraging close relationships with residents. Autonomy may help to reduce job strain, if not isolation. Of note with regards to the latter is that managers typically perceived coworker relationships as detracting from resident-centred care. Yet coworker, as well as client, relationships have scope to act as a resource in work design. This is especially the case in care work, where it can be hard to self-identify compassion fatigue. Managers taking account of coworkers in their decision-making, as is suggested in relational work design, may be to the benefit of workers and residents.

These contributions suggest important avenues for future research. Building on systematic characterization of variation in work design across the five clusters, future research has scope to provide more nuanced and multi-stakeholder insights into the immediate and longer-term consequences and costs of the tensions between residents, workers and organizations in the service triangle, and the choices managers make. The typology of work design should inform research, including longitudinal research, to further interrogate the tradeoffs raised in terms of human resource costs (e.g. turnover) relative to changes in resident well-being associated with each cluster. Specifically, systematic qualitative and quantitative assessment of differences in resident and worker outcomes across the clusters would enable more nuanced assessment of what works best for residents and staff, over what time frame, and at what cost. For example, little (or positive) difference between resident outcomes for clusters 2, 3 and 4 relative to cluster 1, accompanied by positive variation in worker satisfaction and retention would empower managers to work to balance residents and workers interests. Similarly, understanding variation in resident and worker outcomes between clusters 2, 3 and 4 would provide insight into the relative impact of mitigating worker overload (cluster 2), isolation (cluster 3) or both (cluster 4) on integrated jobs and associated worker and resident outcomes. Longitudinal analysis could also explicate the extent of potential benefits of different clusters in terms of staff stability, with potential for enhanced resident outcomes should relationships with long-serving staff develop and care provision become more personalized over a longer time frame. Further analysis of outcomes associated with cluster 5 relative to other clusters would provide insight into the extent to which customization of the care environment, relative to the customization of care itself, can impact on workers and residents' experiences and outcomes. These assessments would help managers move beyond their own subjective assessments, to evidence-informed decision-making regarding the tensions faced in the nursing home service triangle.

We also note the merits of broader research on the influence of different sectoral (private, public, non-profit) and policy contexts on why and how managers make decisions regarding the introduction of new service models and the operationalization of service triangles within these. The service triangle is often studied in private organizations (Subramanian & Suquet, 2018), where market pressures can have influence (O'Riain, 2010). Although not free from competitive pressures, the non-profit status of the organizations in our sample mean that the sharp edges of market competition have been blunted. This is important as one particular barrier to the adoption of new service models, likely to vary across health systems, is the financial context, including constraints on nursing home worker pay (Bishop, 2014). Thus, we also encourage future research on the impact of funding models on new service model adoption and the operationalization of the service triangle. Institutional contexts also vary. For example, in Flanders, nursing homes are typically small and independent organizations with a relatively flat hierarchy. In The Netherlands, nursing homes are typically larger organizations. In the US, the Green House concept is trademarked, potentially reducing variation in practice. Despite variation, managers face shared challenges across systems (Bodenheimer & Sinsky, 2014) and

hold particular responsibility for selecting specific work designs (Morgeson & Humphreys, 2008). Continuing research on why managers select one or other work design cluster will assist in identifying shared tenets of ‘best practice’, supporting managers to enhance staff and residents’ quality of work and life, despite the likely persistence of tensions in the healthcare service triangle.

Conclusion

Sustainable delivery of healthcare needs to take account of labor requirements, while maintaining client satisfaction. Here we have examined how managers navigate day-to-day demands and broader aspirations by shaping their service triangles using work design. Work design can help to attract new care workers to the sector, to retain experienced care workers, and to convince care workers who have left the sector to return (Hussain et al., 2012). The managerial challenge is to operationalize work design in a way that maintains both quality of work and care, taking into account the consequences for both residents and staff. Omitting consideration of the consequences of service models for staff may pose short-term challenges for workers and create longer-term challenges for organizations. This is particularly important in the nursing home sector as worker capacity for exiting the sector is heightened enormously in tight labor markets, where recruitment poses challenges and retention increases in importance (Murdock et al., 2015). Considering this in the context of nursing homes that have all adopted the same person-centred care model illustrates that, in practice, managers respond to tensions in the service triangle in variety of ways: adopting ‘either/or’ (defensive) or ‘both/and’ (active) responses to tensions between residents and workers (Jarzabkowski et al., 2013; Keegan et al., 2019) – with scope for ‘more than’ responses to be introduced (Keegan et al., 2019). This emphasizes the importance of exploring nuance within poles (managerial here) of the service triangle (Lopez, 2010) – and the range of ways in which tensions in the service triangle may be approached and accommodated (Kossek et al., 2020). Work design is key among a range of organizational design decisions with consequences for patients and workers in healthcare (Vogus et al., 2020). We advocate ongoing pursuit of insights into how managers approach these in the context of tensions in the service triangle.

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Table 1: Case organization characteristics

Case ID	Total number of residents in 2015 ^{*1} ^{*2}	Number of residents with cognitive health problems 2015 ^{*1}	Total number of employees in 2015 ^{*3}	Year when small-scale living implemented	Type of home
1	108	56	117	2012	Not-for-profit
2	124	112	165	2008	Not-for-profit
3	/	/	57	2015	Not-for-profit
4	82	55	82	2004	Not-for-profit
5	95	63	/	2011	Not-for-profit
6	107	90	/	2007	Not-for-profit
7	73	37	/	2011	Not-for-profit
8	86	61	108	2005	Not-for-profit
9	165	/	/	2012	Public
10	/	/	/	/	Public
11	138	75	/	2007	Not-for-profit
12	79	51	118	2011	Not-for-profit
13	197	96	/	2014	Not-for-profit
14	75	53	/	2001	Public
15	113	97	150	1985	Not-for-profit
16	94	36	134	2015	Not-for-profit
17	159	101	/	2010	Not-for-profit
18	110	58	113	2012	Not-for-profit
19	106	76	/	2013	Not-for-profit
20	48	47	45	1986	Not-for-profit

Legend: ^{*1} Flemish Agency for Health and Innovation; ^{*2} the dashes ‘/’ refer to the fact that this data was not publicly available in governmental databases; ^{*3} National Bank of Belgium

Table 2: Work design in small-scale nursing homes

Work design aspects			Number of homes		
Level	Detailed aspect				
Intra-unit level	Task pool	Eating: breakfast, lunch and dinner		18	
		Medication		18	
		Washing		20	
		Organising social activities		16	
		Laundry	Everything is washed in the living unit		2
			Facilities for washing available in the living unit		7
			Everything washed in a centralized laundry room		11
		Cooking	Meals cooked in the living unit		4
			Meals heated in the living unit		15
			Meals cooked in central facility		1
	Division of work	Few		3	
		Some		12	
		Substantial		5	
	Team interdependence		Stand-alone teams		4
			Inter-connected care teams		12
			Teams assigned to multiple living units		4
	Autonomous teamworking	Allocation of work		17	
		Scheduling of work		16	
		Quality of work		13	
		Time keeping		16	
		Attendance and absence control		9	
		Coordination of work with other internal groups		16	
		Improving work processes		14	
Supra-unit level	Externalization of tasks		18		
	Centralization	Care service units		12	
		Non-care service units		15	

Table 3: Five work designs in NSSL

Title of design cluster	Intra-unit characteristics			Supra-unit characteristics		Number of nursing homes	How the tensions are dealt with
	Task pool	Division of work	Teamwork	Service units/Centralization	Externalisation		
1. Standalone	Broad	Few	Dedicated autonomous team	Few	Few	3	Prioritizing benefits for residents
2. Serviced standalone	Moderate	Some	Dedicated autonomous team	Some	Some	3	Balancing the benefits and challenges for residents and workers
3. Linked	Broad	Some	Inter-connected autonomous team	Few	Few	5	
4. Shared staff	Moderate	Some	Overarching autonomous team	Some	Some	4	
5. Small-scale conventional	Small	Substantial	Inter-connected constrained team	Substantial	Substantial	5	Avoiding new tensions between residents and workers

Table 4: Benefits and challenges of different work designs

Benefits	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5
Residents live in a homelike environment	●	●	●	●	⊖
Care worker interaction is resident oriented	●	●	●	●	⊖
Residents and care workers develop high quality relationships	●	●	●	●	⊖
Residents receive prompt attention	●	●	●	●	⊖
Care workers can be responsive to unforeseen circumstances	●	●	●	⊖	⊖
Care workers have control over the full care process	●	●	●	⊖	⊖
Care workers have decision-making authority	●	●	●	●	⊖
Care workers have challenging and engaging jobs	●	●	●	●	⊖
Challenges	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5
Residents receive less specialist care from generalists	●	●	●	⊖	⊖
Care workers require a broad range of competencies difficult to obtain in the labour market	●	●	●	⊖	⊖
Care workers development is difficult to support	●	●	●	⊖	⊖
Care workers experience excessive job demands (especially time and workload pressure)	●	●	●	⊖	⊖
Care workers work in isolation	●	●	●	⊖	⊖
Care workers face high emotional demands associated with personal involvement in the role	●	●	●	●	⊖

Legend: ● = Item is a strong feature; ● item is a feature; ⊖ item is not a strong feature

Figure 1: Data collection process

